

REMARKS

Claims 1-50 are all the claims pending in the application and all claims presently stand finally rejected.

Claims 1-10 and 26-37 are finally rejected under 35 U.S.C. § 102(b) as being anticipated by DiDomenico, Jr. et al. (USP 4,165,496).

Claims 18-25 and 38-50 are finally rejected under 35 U.S.C. § 103(a) as being unpatentable over DiDomenico, Jr. et al. (USP 4,165,496) in view of Fukutomi (2001/0033716 A1).

Claims 11-17 are rejected finally under 35 U.S.C. § 103(a) as being unpatentable over Fukutomi (2001/0033716 A1) in view of Zhou (USP 6,081,638).

For the reasons set forth below, Applicant respectfully traverses the rejections and requests favorable disposition of the application.

Argument

Applicant has amended all the independent claims, claims 1, 11, 18, 26, 32, 38 and 44, to more clearly define over the cited prior art.

The present invention relates to an optical semiconductor module in an optical communication network. An optical semiconductor module in accordance with the present invention is equipped with a light monitor 13 that monitors light emitted from a light emitting element 12. The light is received at the light monitor 13 directly from the light emitting element 12 and is never reflected. According to the present invention, therefore, the module can be produced easily and at a lower cost because composition to reflect light is unnecessary.

Incidentally, the light monitor 13 receives the light that is not coupled to an optical waveguide 14.

In accordance with the above description each of the independent claims and, thus, all claims, have been amended to explicitly recite a light monitor, or monitoring means, that receives forward light directly, provided on a clad layer, which is emitted from a light emitting element, or means. The prior art of record fails to disclose or otherwise suggest at least this unique feature as claimed.

For example, Zhou discloses a fiber optical header including a detector 103 detecting light radiated from a light source 102. As shown in Fig. 3 and 4, the light is reflected by a reflective coating 105. Thus, Zhou has to form the reflective coating 105 on an outer surface of a fiber end 10 IA and does not include a light monitor that receives light directly.

Fukutomi discloses an optical waveguide module comprising a photodiode (PD) 8 that detects light emitted from a laser diode (LD) 3. As shown in Fig. 1 and described in paragraph [0041], the light is transmitted through an optical waveguide 2 and detected at the PD 8. On the other hand, the light monitor of the claimed invention receives light directly emitted from the light emitting element without transmitting through the optical waveguide. Furthermore, the light emitting element receives the light that is not coupled to the optical waveguide. Thus, the invention disclosed and claimed in the present application is quite different from the device disclosed in Fukutomi at least because the Fukutomi device detects light which is transmitted through an optical waveguide 2.

DiDomenico discloses an optical fiber tap comprising a photodiode 15 which detects light emitted from a source. As indicated in Fig. 1 and described in the attendant description at column 3, lines 19-45, the light is reflected by beveled endfaces 12 and 13 of the fibers 10 and 11. Therefore, the device disclosed in DiDomenico requires the beveled endfaces 12 and 13 to reflect the light on each of two separated fibers 10 and 11. Accordingly, DiDomenico does not disclose a light monitor that receives light directly, as claimed.

As explained above, all of the cited references, either alone or in combination, fail to teach or suggest a light monitoring means for receiving forward light directly, which is emitted from said light emitting means.

For the reasons provided above, the present invention is clearly distinguished from Zhou, Fukutomi and DiDomenico and the rejections asserted against the present claims should be withdrawn.

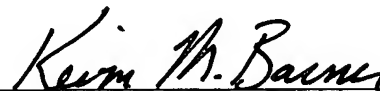
Conclusion

In view of the foregoing amendments and remarks, the application is believed to be in form for immediate allowance with claims **1-50**, and such action is hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, he is kindly requested to **contact the undersigned** at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Appln. No. 10/067,337

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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